

**TOWN OF ACTON – SEWER ACTION COMMITTEE  
FREQUENTLY ASKED QUESTIONS (FAQs)  
EXPANSION AREA - SPENCER/FLINT/TUTTLE NEIGHBORHOOD**

**LOW PRESSURE SEWER SYSTEM**

**What is a low pressure sewer system?**

Low Pressure Sewer Systems are a low-head pressure wastewater collection and treatment system and an alternative to gravity sewer or a septic tank. A Low Pressure Sewer System consists of an interceptor tank and a chamber unit, which houses a small, submersible electrical pump. The tank is installed below ground, much like a septic tank. The liquid in the tank, or effluent, is pumped automatically through a small pressure line that transports it to a wastewater plant for treatment. Low Pressure Sewer Systems have been in use since the late 1970's and are commonly used as an alternative to gravity sewer systems and septic tanks.

**What are the Benefits of a Low Pressure Sewer System?**

They are much less costly to install. In some cases Pressure Mains can be installed on the side of roads, avoiding tearing up streets and expensive road work. Pressure Mains are smaller (2"- 4"), installed at a minimum of 4 feet in depth. There are no "Central Pump Stations" required. The system is environmentally better than gravity as it has a lower potential for storm water infiltration.

**What are the Concerns of a Low Pressure Sewer System?**

Each home has its own individual grinder pump to maintain. If zoning densities should increase, the low pressure system typically has less capacity for the additional flow. Individual home owners could be affected by power outages.

**What is a grinder pump?**

The Town used a sample pump to prepare the preliminary design costs. The actual pump used for the system would be put out to bid. The sample grinder pump is a UL-listed, self-contained appliance that consists of a wastewater-holding basin, a 1-hp SPD grinder pump, on-off controls and a high water alarm. This system is engineered with specific features for residential applications. The following questions are specific to this pump but apply to grinder pumps in general.

**How much does a grinder pump cost?**

The cost of a completely installed system depends on each lot, the soil conditions and the distance from your grinder pump to the public sewer tap. Costs typically range from \$3,000 to \$6,000 installed.

**What happens if this pump fails?**

The grinder pump is a self-contained unit designed to be repaired quickly and easily. Each unit has an alarm that alerts you to call the pump maintenance company. Service calls usually are responded to in less than one hour. You should keep water use to a minimum until a technician arrives. If you need to shower, close the drain so you won't overwhelm the unit. Use your toilet sparingly.

**How long will my pump last before I need to repair or replace it?**

One company currently has systems in place that have been in operation for over 25 years. Typically there is an 8- to 10-year period before service is required to replace wearing pump parts.

**Does the pump have an alarm to warn me if something is wrong?**

Yes. An alarm panel, located outside your home or inside your garage, has an audible and visual

alarm that indicates high water levels in your grinder pump's tank. If there is a problem with the unit, you will get a notification by the alarm. Use the silence switch to silence the alarm and call for service immediately.

**Do pumps require much maintenance?**

No. Unlike other appliances or equipment in your home, no periodic maintenance is required. The system is designed to be virtually maintenance-free for long periods. The grinder pump core is an electro-mechanical device that will eventually require service. You can expect some sort of repair to a properly installed unit after 8 to 10 years.

**What happens if there is a power failure?**

If the power is off, the pump will not operate. However, there is a reserve capacity in the interceptor tank which allows for approximately eight hours of normal use (excluding uses such as running a washing machine and taking a bath) before you will experience any difficulty. Pumps automatically reset after a power failure. They are designed to handle flows and heads developed when all the pumps come on at the same time. Centrifugal pumps will all go to shut-off because of the high head and won't pump anything.

**Can sewage back up into a home with the low- pressure system?**

No. Check valves on the grinder pump and at the street prevent the street main sewage from entering your pump and home. If installed properly any serious malfunction will result in sewage discharging outside the home.

**How noisy is the pump?**

With an outdoor unit buried in the ground, you will not hear it at all if you're 10 or 15 feet away. If you're standing on top of it, it sounds like your washing machine when it's running — just a hum.

**What will this look like in my yard?**

The system will be buried and the only thing you'll see is top cover, which is less than 30 inches in diameter. The cover is designed to blend into your yard as much as possible and can easily be landscaped to become more invisible.

**Who will be responsible for maintaining my pump?**

The Sewer Action Committee is recommending that each property owner should maintain his own pump and will be required to have a contract in place. The DEP will require maintenance contracts as part of the permitting process. As part of the management agreement the contractor maintaining the pumps would agree to provide generator services. When electricity is lost they would go to each pump and activate the pump with a generator. By requirements of DEP all lines entering the grinder pump and leaving the grinder pump must be a minimum of 4' below the surface, which is considered the safe depth from frost in this area. All prices are based on the requirement of a minimum 4' depth. The estimated cost for a maintenance contract is \$175 a year or approximately \$15 a month.

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